TDMS0030 DATA EVALUATION RECORD PAGE 1 OF

CASE GS0014 ENDOSULFAN STUDY 124 PM 110 08/20/80

CHEM 079401 ENDOSULFAN

BRANCH EFB DISC 30 TOPIC 0515

FORMULATION 00 = ACTIVE INGREDIENT

FICHE/MASTER ID 05013707 CONTENT CAT 06

SPIRO, S.; TREVISANI, G.R. (1974) STUDIO DI UN METODO PER LA DETERMINAZIONE SIMULTANEA DI PESTICIDI CLORURATI E FOSFORATI NELL'ARIA: NOTA 2--DERIVATI FOSFORO-ORGANICI E DATI RELATIVI ALLA CONCENTRAZIONE DI PESTICIDI NELL'ATMOSFERA DI ZONE AGRICOLE. THE STUDY OF A METHOD FOR THE SIMULTANEOUS DETERMINATION OF CHLORINATED AND PHOSPHOROUS-CONTAINING PESTICIDES IN THE AIR: NOTE 2--ORGANOPHOSPHORUS DERIVATIVES AND DATA RELATIVE TO THE CONCENTRATION OF PESTICIDES IN THE ATMOSPHERE IN AGRICULTURAL AREAS. I BOLLETTINO DEI LABORATORI CHIMICI PROVINCIALI. BULLETIN OF THE PROVINCIAL CHEMICAL LABORATORY. I 25(9):157-164.

SUBST. CLASS = S.

OTHER SUBJECT DESCRIPTORS
PRIM: RCBP-05-1015

DIRECT RVW TIME = 5 (MH) START-DATE END DATE

REVIEWED BY: M. Minnich
TITLE: Staff Scientist
ORG: Enviro Control, Inc., Rockville, MD
LOC/TEL: 468-2500

SIGNATURE: M. Minnich DATE: Sept. 26, 1980

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE: DATE:

CONCLUSIONS:

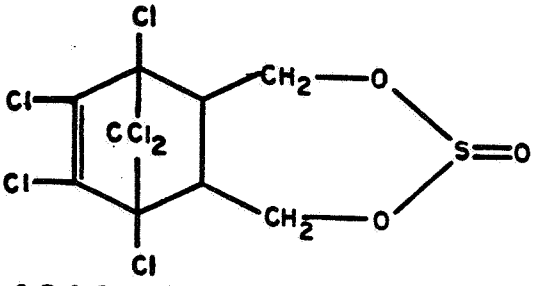
Mobility - Volatility

1. This study is scientifically valid.

2. Limited air monitoring showed background levels of endosulfan in two agricultural fields (Terlano County, Italy) to have been around 25 ng/m^3 during four days in July 1973. The concentration reportedly dropped to around 4 ng/m^3 during four days in September 1973.

MATERIALS AND METHODS:

ENDOSULFAN, BENZOEPIN, BEOSIT, CHLORTIEPIN, CYCLODAN, INSECTOPHENE, MALIX, THIFOR, THIMUL, THIODAN, THIONEX, THIOSULFAN, TIONEL, TIOVEL



6,7,8,9,10,10-Hexachloro-1,5,5a,6, 9,9a-hexahydro-6,9-methano-2,4, 3-benzodioxathiepin-3-oxide

During the months of July and September of 1973, an agricultural area of Bolzano province (Italy) was monitored for airborne pesticide residues. Air samples were collected on 4 days in July and on 4 days in September in an orchard that had been sprayed with mevinphos (Phosdrin) the day prior to the onset of monitoring. An Asema type suction apparatus connected to an absorber (filled with glass balls covered with diethyleneglycol) was placed so as to sample air 90 cm from the ground. It operated from about 8 a.m. to 7 p.m. each day, with a daily total of 6.6 m^3 of air passing through the absorber. A full description of the extraction and analysis of the pesticides from the absorber was given in an earlier article (Spiro, S., and G.R. Trevisani. 1973. Boll. Lab. Chim. Prov. 24:179). The method consisted of a benzene extraction, some cleanup steps, and gas chromatographic analysis.

REPORTED RESULTS:

The concentrations of α- and β-endosulfan in July were 30 ng/m^3 on July 2 and 20-25 ng/m^3 on July 3-5. In September, the level had dropped to 4-5 ng/m^3 for 3 days and was reported at only trace levels on the last day monitored.

DISCUSSION:

Although lacking the full analytical procedural details in this article (including statistical analysis and trapping efficiency), the work is competently reported and may provide useful information for estimating expected background levels of endosulfan in agricultural areas.